RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/589,726
Source: IFW P
Date Processed by STIC: 8/28/06

ENTERED

IFWP

RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: **US/10/589,726** TIME: 10:23:46

Input Set : **A:\22000129U2.Seq**
Output Set: **N:\CRF4\08282006\J589726.raw**

4 <110> APPLICANT: HAWIGER, Jack J.
5 JO, Daewoong
7 <120> TITLE OF INVENTION: Cell-Permeable SOCS Proteins that
8 Inhibit Cytokine-Induced Signaling
11 <130> FILE REFERENCE: 22000.0129U2
C--> 13 **<140> CURRENT APPLICATION NUMBER: US/10/589,726**
14 <141> CURRENT FILING DATE: 2006-08-17
16 <150> PRIOR APPLICATION NUMBER: PCT/US2005/0075203
17 <151> PRIOR FILING DATE: 2005-03-04
19 <150> PRIOR APPLICATION NUMBER: 60/550,037
20 <151> PRIOR FILING DATE: 2004-03-04
22 <160> NUMBER OF SEQ ID NOS: 29
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 19
28 <212> TYPE: PRT
29 <213> ORGANISM: Artificial Sequence
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
33 synthetic construct
35 <400> SEQUENCE: 1
36 Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
37 1 5 10 15
38 Arg Gly Ser
41 <210> SEQ ID NO: 2
42 <211> LENGTH: 12
43 <212> TYPE: PRT
44 <213> ORGANISM: Artificial Sequence
46 <220> FEATURE:
47 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
48 synthetic construct
50 <400> SEQUENCE: 2
51 Ala Ala Val Leu Leu Pro Val Leu Leu Ala Ala Pro
52 1 5 10
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 212
56 <212> TYPE: PRT
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
61 synthetic construct
63 <400> SEQUENCE: 3
64 Met Val Ala Arg Asn Gln Val Ala Ala Asp Asn Ala Ile Ser Pro Ala

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PATENT APPLICATION: US/10/589,726 TIME: 10:23:46

Input Set : A:\22000129U2.Seq
Output Set: N:\CRF4\08282006\J589726.raw

```
 1                5                  10                  15
Ala Glu Pro Arg Arg Arg Ser Glu Pro Ser Ser Ser Ser Ser Ser Ser
            20                  25                  30
Ser Pro Ala Ala Pro Val Arg Pro Arg Pro Cys Pro Ala Val Pro Ala
        35                  40                  45
Pro Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser His Ser Asp
    50                  55                  60
Tyr Arg Arg Ile Thr Arg Thr Ser Ala Leu Leu Asp Ala Cys Gly Phe
65                  70                  75                  80
Tyr Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg Leu Arg Ala
                85                  90                  95
Glu Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys
            100                 105                 110
Phe Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg
        115                 120                 125
Val His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Thr
    130                 135                 140
Phe Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg
145                 150                 155                 160
Arg Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln
                165                 170                 175
Glu Leu Cys Arg Gln Arg Ile Val Ala Ala Val Gly Arg Glu Asn Leu
            180                 185                 190
Ala Arg Ile Pro Leu Asn Pro Val Leu Arg Asp Tyr Leu Ser Ser Phe
        195                 200                 205
Pro Phe Gln Ile
    210
<210> SEQ ID NO: 4
<211> LENGTH: 225
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence; note =
      synthetic construct
<400> SEQUENCE: 4
Met Val Thr His Ser Lys Phe Pro Ala Ala Gly Met Ser Arg Pro Leu
 1               5                  10                  15
Asp Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser Lys Ser Glu Tyr Gln
            20                  25                  30
Leu Val Val Asn Ala Val Arg Lys Leu Gln Glu Ser Gly Phe Tyr Trp
        35                  40                  45
Ser Ala Val Thr Gly Gly Glu Ala Asn Leu Leu Leu Ser Ala Glu Pro
    50                  55                  60
Ala Gly Thr Phe Leu Ile Arg Asp Ser Ser Asp Gln Arg His Phe Phe
65                  70                  75                  80
Thr Leu Ser Val Lys Thr Gln Ser Gly Thr Lys Asn Leu Arg Ile Gln
                85                  90                  95
Cys Glu Gly Gly Ser Phe Ser Leu Gln Ser Asp Pro Arg Ser Thr Gln
            100                 105                 110
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RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: US/10/589,726 TIME: 10:23:46

Input Set : A:\220000129U2.Seq
Output Set: N:\CRF4\08282006\J589726.raw

```
117 Pro Val Pro Arg Phe Asp Cys Val Leu Lys Leu Val His His Tyr Met
118         115                 120                 125
119 Pro Pro Pro Gly Thr Pro Ser Phe Ser Leu Pro Pro Thr Glu Pro Ser
120     130                 135                 140
121 Ser Glu Val Pro Glu Gln Pro Pro Ala Gln Ala Leu Pro Gly Ser Thr
122 145                 150                 155                 160
123 Pro Lys Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly Glu Lys Ile Pro Leu
124                 165                 170                 175
125 Val Leu Ser Arg Pro Leu Ser Ser Asn Val Ala Thr Leu Gln His Leu
126             180                 185                 190
127 Cys Arg Lys Thr Val Asn Gly His Leu Asp Ser Tyr Glu Lys Val Thr
128         195                 200                 205
129 Gln Leu Pro Gly Pro Ile Arg Glu Phe Leu Asp Gln Tyr Asp Ala Pro
130     210                 215                 220
131 Leu
132 225
134 <210> SEQ ID NO: 5
135 <211> LENGTH: 243
136 <212> TYPE: PRT
137 <213> ORGANISM: Artificial Sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
141       synthetic construct
144 <400> SEQUENCE: 5
145 Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
146  1               5                  10                  15
147 Arg Gly Ser Met Val Ala Arg Asn Gln Val Ala Ala Asp Asn Ala Ile
148             20                  25                  30
149 Ser Pro Ala Ala Glu Pro Arg Arg Arg Ser Glu Pro Ser Ser Ser Ser
150         35                  40                  45
151 Ser Ser Ser Ser Pro Ala Ala Pro Val Arg Pro Arg Pro Cys Pro Ala
152     50                  55                  60
153 Val Pro Ala Pro Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser
154 65                  70                  75                  80
155 His Ser Asp Tyr Arg Arg Ile Thr Arg Thr Ser Ala Leu Leu Asp Ala
156                 85                  90                  95
157 Cys Gly Phe Tyr Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg
158             100                 105                 110
159 Leu Arg Ala Glu Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln
160         115                 120                 125
161 Arg Asn Cys Phe Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr
162     130                 135                 140
163 Ser Ile Arg Val His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser
164 145                 150                 155                 160
165 Arg Glu Thr Phe Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala
166                 165                 170                 175
167 Ala Pro Arg Arg Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg
168             180                 185                 190
169 Pro Leu Gln Glu Leu Cys Arg Gln Arg Ile Val Ala Ala Val Gly Arg
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RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: US/10/589,726 TIME: 10:23:46

Input Set : A:\22000129U2.Seq
Output Set: N:\CRF4\08282006\J589726.raw

```
170         195                 200                 205
171 Glu Asn Leu Ala Arg Ile Pro Leu Asn Pro Val Leu Arg Asp Tyr Leu
172     210                 215                 220
173 Ser Ser Phe Pro Phe Gln Ile Ala Ala Val Leu Leu Pro Val Leu Leu
174 225                 230                 235                 240
175 Ala Ala Pro
178 <210> SEQ ID NO: 6
179 <211> LENGTH: 243
180 <212> TYPE: PRT
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
185       synthetic construct
187 <400> SEQUENCE: 6
188 Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
189  1               5                  10                  15
190 Arg Gly Ser Ala Ala Val Leu Leu Pro Val Leu Leu Ala Ala Pro Met
191             20                  25                  30
192 Val Ala Arg Asn Gln Val Ala Ala Asp Asn Ala Ile Ser Pro Ala Ala
193         35                  40                  45
194 Glu Pro Arg Arg Arg Ser Glu Pro Ser Ser Ser Ser Ser Ser Ser Ser
195     50                  55                  60
196 Pro Ala Ala Pro Val Arg Pro Arg Pro Cys Pro Ala Val Pro Ala Pro
197 65                  70                  75                  80
198 Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser His Ser Asp Tyr
199                 85                  90                  95
200 Arg Arg Ile Thr Arg Thr Ser Ala Leu Leu Asp Ala Cys Gly Phe Tyr
201             100                 105                 110
202 Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg Leu Arg Ala Glu
203         115                 120                 125
204 Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys Phe
205     130                 135                 140
206 Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg Val
207 145                 150                 155                 160
208 His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Thr Phe
209                 165                 170                 175
210 Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg Arg
211             180                 185                 190
212 Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln Glu
213         195                 200                 205
214 Leu Cys Arg Gln Arg Ile Val Ala Ala Val Gly Arg Glu Asn Leu Ala
215     210                 215                 220
216 Arg Ile Pro Leu Asn Pro Val Leu Arg Asp Tyr Leu Ser Ser Phe Pro
217 225                 230                 235                 240
218 Phe Gln Ile
221 <210> SEQ ID NO: 7
222 <211> LENGTH: 244
223 <212> TYPE: PRT
224 <213> ORGANISM: Artificial Sequence
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RAW SEQUENCE LISTING DATE: 08/28/2006
PATENT APPLICATION: **US/10/589,726** TIME: 10:23:46

Input Set : **A:\220000129U2.Seq**
Output Set: **N:\CRF4\08282006\J589726.raw**

<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence; note = synthetic construct

<400> SEQUENCE: 7

```
Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
 1               5                  10                  15
Arg Gly Ser Met Val Thr His Ser Lys Phe Pro Ala Ala Gly Met Ser
            20                  25                  30
Arg Pro Leu Asp Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser Lys Ser
        35                  40                  45
Glu Tyr Gln Leu Val Val Asn Ala Val Arg Lys Leu Gln Glu Ser Gly
    50                  55                  60
Phe Tyr Trp Ser Ala Val Thr Gly Gly Glu Ala Asn Leu Leu Leu Ser
65                  70                  75                  80
Ala Glu Pro Ala Gly Thr Phe Leu Ile Arg Asp Ser Ser Asp Gln Arg
                85                  90                  95
His Phe Phe Thr Leu Ser Val Lys Thr Gln Ser Gly Thr Lys Asn Leu
            100                 105                 110
Arg Ile Gln Cys Glu Gly Gly Ser Phe Ser Leu Gln Ser Asp Pro Arg
        115                 120                 125
Ser Thr Gln Pro Val Pro Arg Phe Asp Cys Val Leu Lys Leu Val His
    130                 135                 140
His Tyr Met Pro Pro Pro Gly Thr Pro Ser Phe Ser Leu Pro Pro Thr
145                 150                 155                 160
Glu Pro Ser Ser Glu Val Pro Glu Gln Pro Pro Ala Gln Ala Leu Pro
                165                 170                 175
Gly Ser Thr Pro Lys Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly Glu Lys
            180                 185                 190
Ile Pro Leu Val Leu Ser Arg Pro Leu Ser Ser Asn Val Ala Thr Leu
        195                 200                 205
Gln His Leu Cys Arg Lys Thr Val Asn Gly His Leu Asp Ser Tyr Glu
    210                 215                 220
Lys Val Thr Gln Leu Pro Gly Pro Ile Arg Glu Phe Leu Asp Gln Tyr
225                 230                 235                 240
Asp Ala Pro Leu
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<210> SEQ ID NO: 8
<211> LENGTH: 256
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence; note = synthetic construct

<400> SEQUENCE: 8

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Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
 1               5                  10                  15
Arg Gly Ser Met Val Thr His Ser Lys Phe Pro Ala Ala Gly Met Ser
            20                  25                  30
Arg Pro Leu Asp Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser Lys Ser
        35                  40                  45
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VERIFICATION SUMMARY DATE: 08/28/2006
PATENT APPLICATION: **US/10/589,726** TIME: 10:23:47

Input Set : **A:\22000129U2.Seq**
Output Set: **N:\CRF4\08282006\J589726.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number